



FURNITURE.

Westinghouse

Nov 75

ASD  
Group



# The working environment that works

A practical working environment engineered to accommodate the shifting relationships, work loads and varying responsibilities demanded by today's businesses and institutions.

In the past decade alone, great strides have been made in the computer sciences, the technology of copying and in word processing. We continue to be challenged by new dimensions in the dissemination and processing of information.

## The office—a tool:

The office is no longer viewed and revered as a static fixture—immovable and resistant to change. But rather it is a dynamic, living and breathing "tool" to be used as a responsive vehicle to the challenge of change.

## Responsiveness means Understanding:

As a response to the dynamics of change, the open plan office was created. Philosophically, it first concerns itself with analysis and evaluation of the organization under study. It delves into the flow of information. How do the people communicate? What systems and procedures are used or should be employed to make the office's work flow efficiently? What administrative support systems are required? What emphasis in relationship to cost should original investment play?—And how are the long-term going costs relating to personnel incorporated in your plan?

## Flexibility:

The concept of open plan office planning must concern itself with space and furniture requirements. The office must be potentially responsive to future expansion. The furniture must be truly flexible and perceptible. It must not lock you in, but should be correctable in nature. Change your plan and mind as the conditions of the office change. The Westinghouse ASD Group system has this flexibility.

## Sound:

The living office is a dynamic environment. Formal office sounds such as conversations, the clatter of typewriters, and the hum of the space. This is all contributing to the sound environment of the office. Control of the noise level is therefore important.

In the open plan office, sound must be engineered out through soundly planned acoustical controls such as balanced acoustical ceilings, sound absorbers, sound screening, carpeting, and the introduction of masking or background sound known as "white noise" or "acoustical perfuming." These masking systems are built into the ceiling. By controlling the level and intensity of sound, the open office is an exciting and vibrant work environment. Enough sound to experience involvement, but sufficiently subdued to work and converse in both reasonable and practical privacy.

## Energy Conservation:

The logic of open offices is greatly reinforced because of today's critical energy problems. How does a space planning system conserve energy?—By the emphasis on a relatively low number of lumens per square foot of ceiling lighting, and greater emphasis on "task" lighting at the work surface where greater light intensity is needed. The trend is "up" or indirect lighting from the work station and the total elimination of ceiling lights. The open plan allows for a reappraisal of lighting concepts, to reduce wattage used and heat generated from overhead lights.

Heating and air conditioning is more easily controlled in the open plan. It is no longer required to have separate zone controls for large numbers of individual offices. The large single open office spaces are not

inhibited by ceiling-high walls. Control of energy use is therefore greatly enhanced and resultant savings can be attained.

## Planning for People:

Planning for human considerations is like planning the management of our most important asset—People. The good open office plan concerns itself with the behavioral aspects that motivate people. It doesn't mean to placate the "whims" of the worker but to realistically analyze the needs of people as related to the environment in which people will be immersed. For this environment is directly related to the efficiency and productivity of the office worker.

## Economics of Change and Facilities:

After analyzing original investment cost, maintenance or operating costs, and the heavy costs related to personnel and the potential cost impact of increasing efficiency and productivity, you then should delve deeply into the cost of changing the layout.

Flexibility is a must because change in today's world is inevitable.

Documented figures show that major change in traditional office layouts can cost from a low of \$6.00 per square foot of floor space to as much as \$25.00 per square foot. These figures compare with major changes within the broad spectrum of the open office of only 10¢ to 75¢ per square foot. The Westinghouse ASD Group system is among the easiest and least expensive to alter and rearrange because of the simple universal post connections and the simplicity of hanging and removing components.

Future flexibility then is as important as—and may even be more important than—first cost in the economics of open offices.

A good system of open plan offices is responsive to each user's needs. One of the country's leading insurance executives explains the approach this way: "The open plan system is a disciplinary framework which restricts unwanted clutter yet is permissive enough to allow greater freedom of expression for both the individual and the organization." And, when form follows function, the result is beauty as well as efficiency.

## Concept—Furniture:

An open plan system is a composite of the concept (software) and the furniture (hardware). You must buy the rationale before you buy the hardware, because the analysis of your needs in these ever-changing times will determine what products you require to meet your firm's needs and requirements.

Basically, the hardware consists of a variety of panels, both acoustical and hard-surfaced, that are offered in various heights and include an ability to hang various needed components from the panels. The components include work surfaces, case goods, shelves, tackboards, display shelves, paper organizers, a system of drawers, lights, wardrobes, chalkboards, tackboards and a variety of miscellaneous accessories.

## This is the Westinghouse ASD Group:

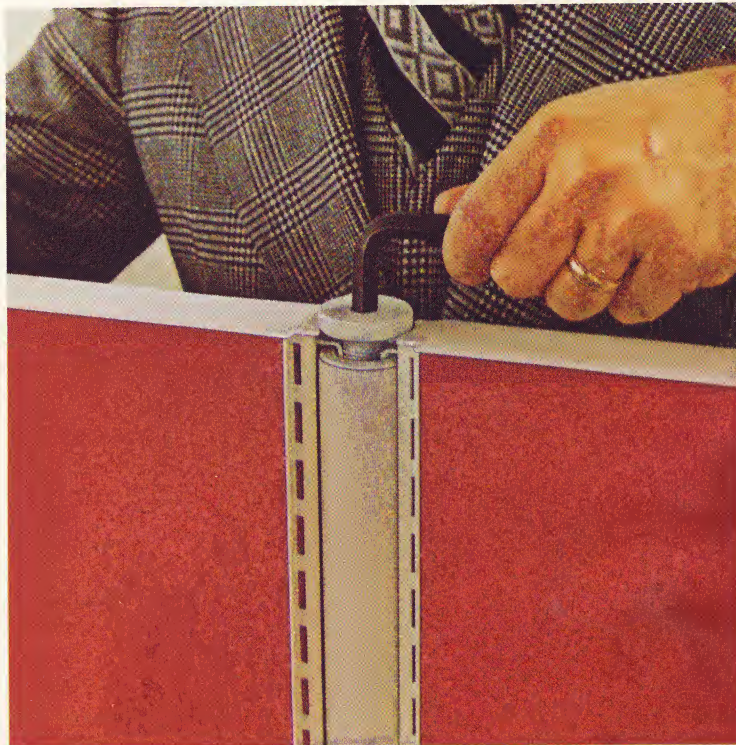
The system that will work for you is the ASD Group. Its great charm comes from its exceptional adaptability, the cheerful, open, informal work arrangements, and the freedom from monotony even in large groupings of workers.

The pages which follow describe many of the individual features which make it worth your while to consider the use of Westinghouse ASD Group in your office.

# Panels fit to post and accommodate change

A simple allen wrench is used to loosen post cap so panels can be moved, added or taken out. You can use any configuration of walls from "free-form" to rectilinear shapes.

The post panel system is designed to conform to established building modules because dimensions are figured centerline to centerline. You can always stay on "grid" without gaining or losing inches during installation.



**Right:**  
Wall panels attach to the ASD patented universal post anywhere on a 360° radius. The steel post will accept one to four panels that can be changed easily and quickly.

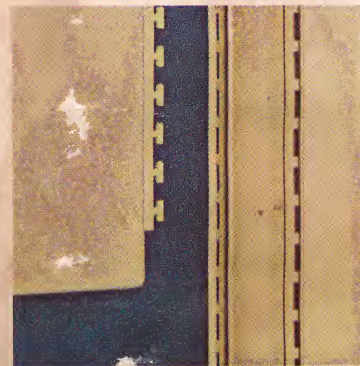
The steel slotted standards on each panel have continuous one inch on-center slots for attaching hanging components at the precise height you want them.

**Below Left:**  
Functional and decorative—overhead umbilicals distribute electrical, telephone, cable circuitry and other power needs from their source to the patented ASD Group Power Panel. This unique sys-

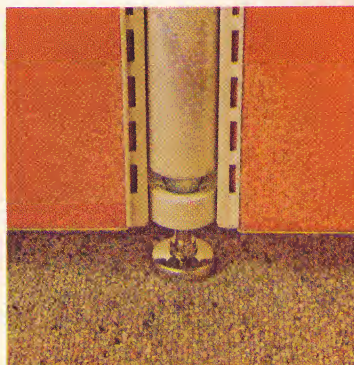
tem for handling power requirements at work stations is Underwriters' approved and allows a maximum of flexibility. Accessibility is provided from both sides of the Power Panel and can serve four stations or more.



**Above:**  
Colorful acoustical panels provide not only a design accent, but double as functioning tackboards.



Shelf and cabinet end panels have a "Z" shaped metal tab secured by screws which penetrate both the end panel and the metal tab for positive holding. They fit into the slots on the wall panels in 1" increments and are weight tested for maximum storage.



**Left:**  
This leveling device is an integral part of the universal post and provides simple adjustment. Available with carpet adapters.





This interesting grouping of 80" Micarta® surfaced and sound absorbing acoustical panels serve as the boundary of this main corridor combining the use of solid colors and fabric design. The panels are free standing and can be altered simply and speedily to meet changing needs and office revisions.



Above:  
Creative use of decorative fabric panels stimulates and enlivens this area. The impression of openness provided by the glass panel in the far corner becomes a focal point for both the reception room and the main corridor. Always a warm, bright, and open environment to work in and visit.

Panels are available in 12", 24", 36", 48" and 60" widths (centerline to centerline); 48", 60" or 80" heights.



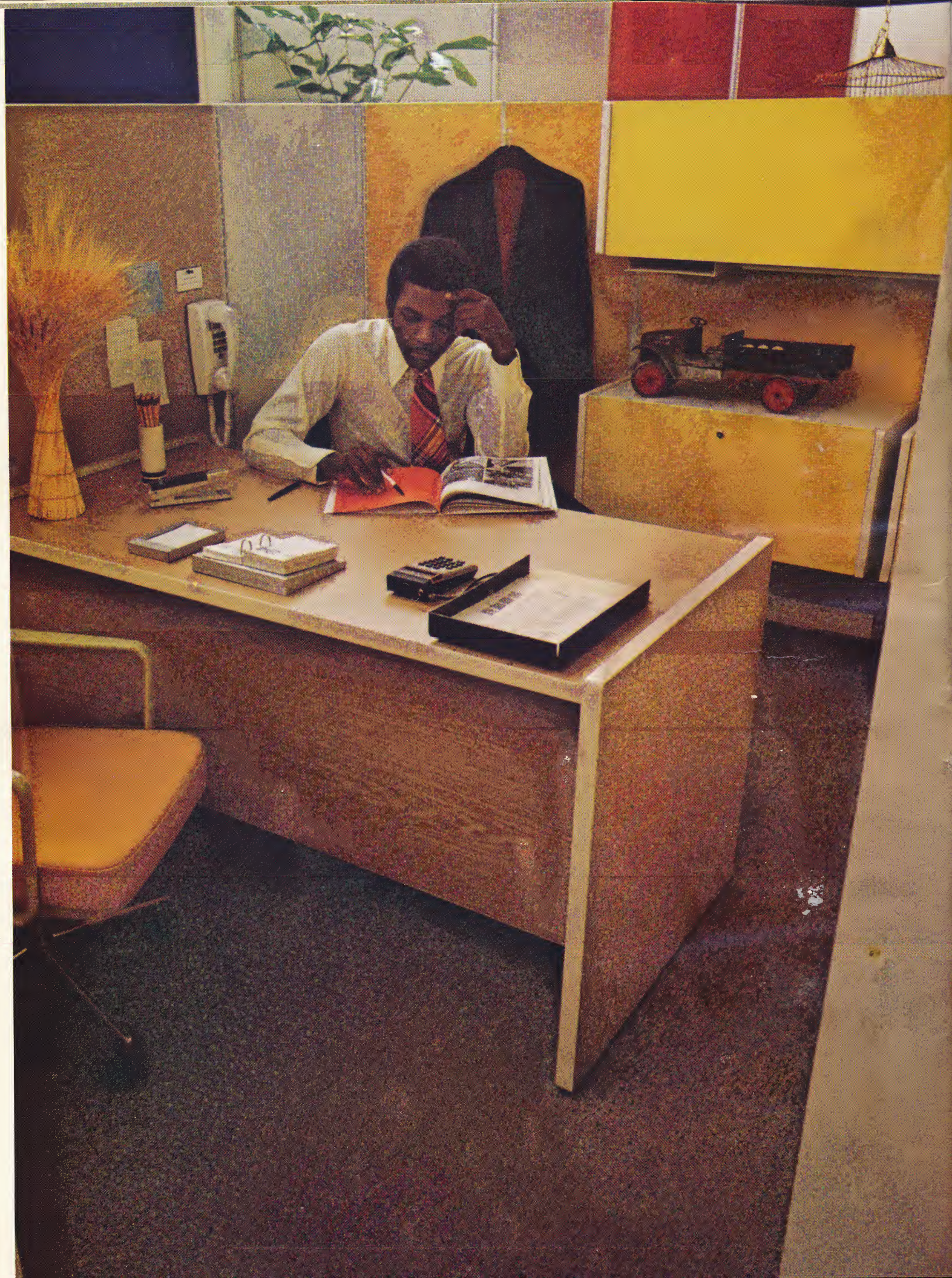
The end panel is designed to provide support for adjacent panels which are loaded with hanging components on one or two sides or to support panels run at end conditions. Used as the one shown above they provide a convenient nook for plants or an ASD Chair.

End panels are available in three heights and two widths and have an adjustable leveling leg at the front edge.

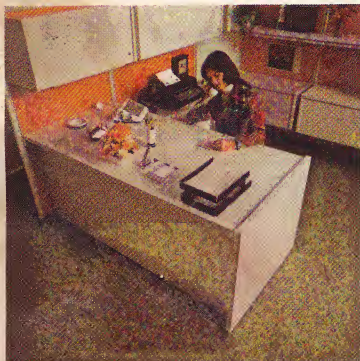
Right:  
This 60" Micarta panel is attached to the 80" fabric panel with the dual connector. Combining panel heights to meet design and functional requirements is easy with the ASD Group system. Dual and

triple connectors make the assembly of different height panels possible in one integrated unit of panel combinations.





# Work surfaces that hang or stand— Flexibility is the word



Left and Facing Page:  
Work surfaces that hang  
from the panel on one end and stand  
freely on the other end. One of  
many ways to design to the needs  
of people.



Exposed corners on work surfaces,  
shelves and cabinets are round-  
ed and all corners and leading edges  
are protected with a resilient high-  
impact plastic nosing.



Cantilevered work surfaces come  
in many sizes—fit most needs. They  
can be positioned anywhere on the  
panel; high or low for stand-up or  
sit-down work positions. Cantilevers  
are cast aluminum and provide  
the maximum in rigidity with beauty

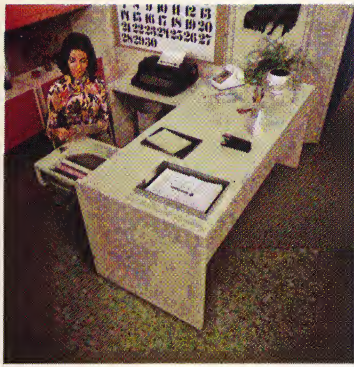


of design. ASD Group drawers hang  
from the work surfaces in many  
combinations. The floor support  
leg can be used with the cantilever  
for panel support and is comple-  
mentary in design.

These drafting board work surfaces  
are equipped with a friction clutch  
mechanism that permits adjustment  
to any angle from horizontal to  
vertical. Height adjustment is also  
possible to meet individual  
requirements.

Right:  
This unique work surface is sup-  
ported on both ends by steel  
stretchers attached to the wall  
panels. Allows for vertical adjust-  
ment and provides a compact, rigid  
assembly. Will accept any combina-  
tion of drawers and creates a  
close knit, convenient working  
environment.





This free-standing desk unit has a typing return attached. Available in a variety of sizes; it provides a comfortable and efficient work station for the worker.



Soft, rounded corners. Easy on people and furniture and good looking too!



Above and Left:  
The ASD Desk. Complementary to the ASD Group system work surfaces. Built for design freedom—pick the size you want—determine the style and type of drawer units you want—select from a large variety of colors.

Perfectly at ease in his open office, this supervisor is accessible, yet readily free from distractions. The environment creates an air of spaciousness but is still disciplined and functional.

Right:  
The cantilevered work surface, the tub drawers, the shelf and cabinet, the conference table—all combine to provide a pleasant, complete and compact work station. Here, task lighting and tackable fabric panels lend warmth and personality to the working area.





# Tub and Pedestal Drawer Systems



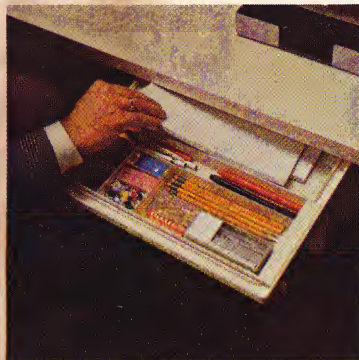
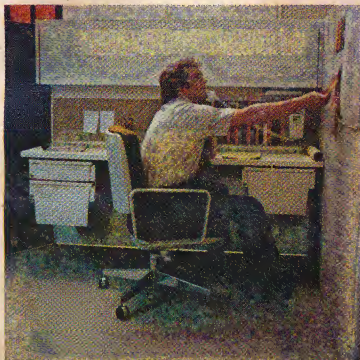
Above:  
The 6" pedestal drawer features full suspension hardware, fronts in a variety of colors and accessories such as paper organizers, dividers, pencil trays, etc.

The new ASD Drawer Tub and Pedestal Drawer systems is a Westinghouse innovation which provides the user, designer and architect the ultimate in flexibility and design. There are two basic drawer systems: the Pedestal System and the Tub System (see the ASD Group Components Catalog for details).



tub drawer is lockable and can be used singly or in combination with the pencil or box tub drawer.

Left:  
The tub drawer pictured on the left is a deep tub with movable file bars and will accommodate letter, legal or European size paper. The



Above and Left:  
The ASD Tub Drawer system is for the economy minded user who wishes to combine function, beauty and low cost. The tubs are the same tubs used in the ASD Pedestal Drawer system but are designed to function without separate fronts.

There are seven standard assemblies offered in three colors. All tub drawers except pencil drawer slide on steel, full extension, ball bearing glides and have keyed locks. Full line of accessories available.

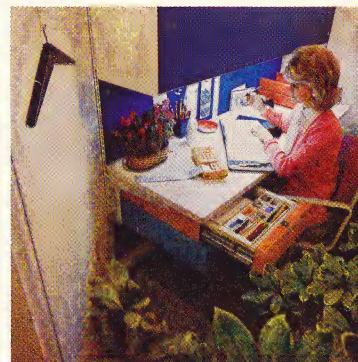


The ASD Pedestal Drawer system features three compatible unit sizes — 3" pencil drawer, 6" box drawer or a 12" file drawer. These can be used singly or in any combination.

The fronts are molded with a recessed hand pull. Available in eight decorator colors.



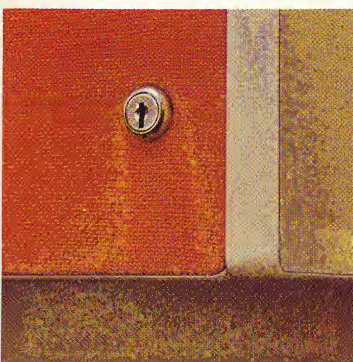
Above Right:  
The pedestal drawer is equipped with a unique combination lock. Shown below is the pencil tray accessory.



# Cabinets, shelves, files— all hang on the panels



This wall hung file bin provides the utmost in convenience and economy. Hang it at any height. The pivoting door has holding hardware and the unit is Micarta surfaced. Accepts letter or legal size hanging files.



**Below Left:** Key locks are furnished for all bins, files and cabinets and attractively highlight rounded corners with plastic nosing and Micarta surfaces.

**Right:** This patented flipper door cabinet with its innovative and functional ball bearing hinge assembly allows even the six foot door to be lifted without binding or racking. Nylon glides protect the top shelf and smooth the movement of the door. Available in 36", 48", 60" and 72" lengths and standard and EDP depths. Accessorize with shelf dividers or paper organizers for work needs and light from the underside of the cabinet for task lighting requirements.



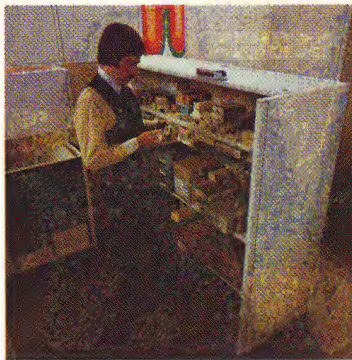
This cabinet doubles as a work surface. The downward opening door is of lightweight construction, has friction loaded hardware to prevent sudden dropping and a Micarta high pressure laminate writing surface. Use it as a file or a storage unit.

**Right:** The lateral files are pre-assembled units. They are full suspension with heavy duty steel glides permitting them to be pulled out to full depth. Adaptable. Designed to accept either letter or legal size hanging files. The file tub is steel construction and front, top and side panels feature Micarta decorator colors in a broad selection.

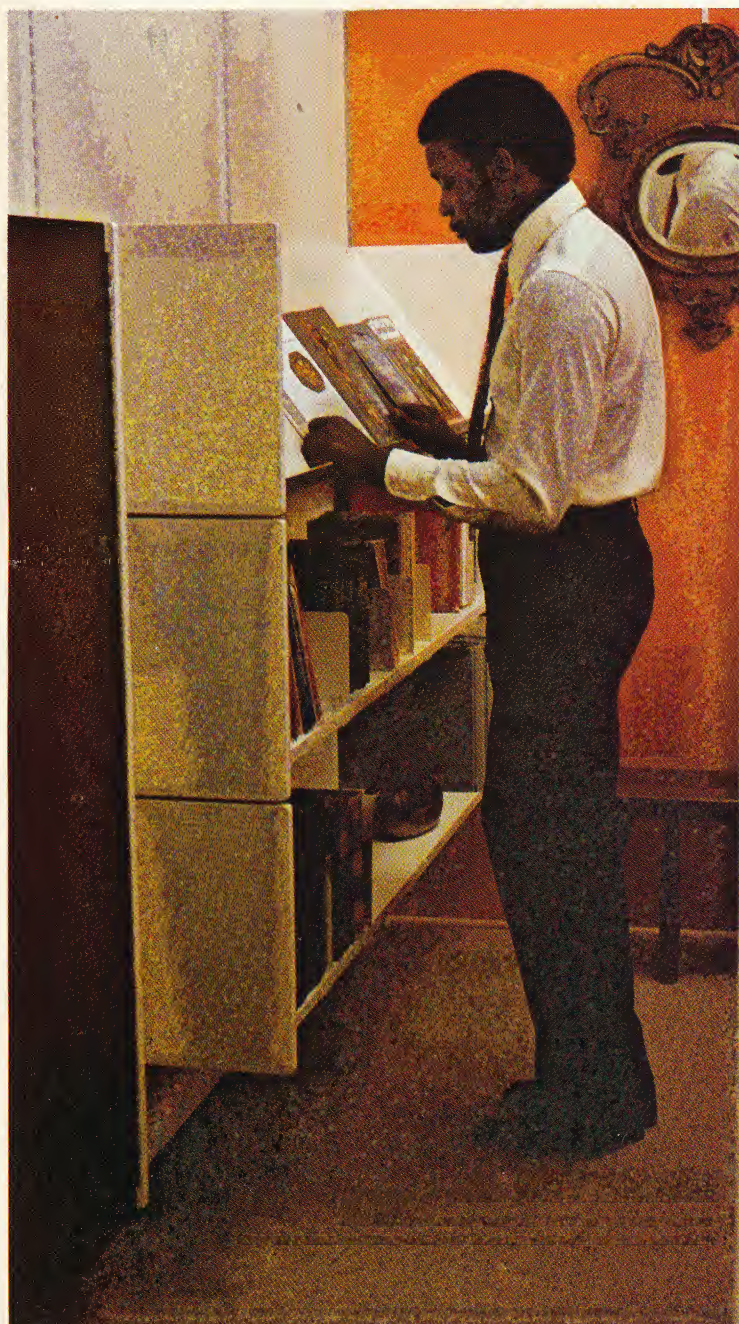




# Hanging shelves and cabinets



Install shelf assemblies in combination with cabinet units out of the way on wall panels or conveniently adjacent to work station. Shelves are steel with Micarta surfaced end panels and are edged with resilient, high impact plastic.



The slanted display shelf has endless uses. It's used to display products, literature or magazines. Also used in combination with standard ASD shelf assemblies for storage of books and other items in a work area or as a library center. Sturdy enough to support heavy loads, easy to change. Shelf end panels have metal tabs and just snap into slotted standards on wall panels



or slotted wall standard for hanging to permanent walls. Standard shelves are available in a variety of widths and depths. (See the ASD Group Components Catalog for details.)

Standard shelves, display shelves and a variety of cabinets and file storage units provide a working wall for massive storage requirements. Lighting installed under shelf can provide both a functional and aesthetically intriguing effect. Easily mounted to shelf flanges with metal hangers. The cast aluminum support legs give added rigidity to the total assembly.





# ASD Tables



Above:  
Typist's work surface is pro-  
at the proper height for efficient,  
comfortable typing. Micarta end and  
modesty panel integrate functionally  
with clerical tasks. Decorative

A study in simplicity and func-  
tionalism. This table grouping has  
clean, honest lines that com-  
bine a segmented base system and  
a large variety of tops.



This table doubles as a typing or  
machine table. It has casters that  
can be locked in position when in  
use or it can be provided with  
levelers. Move it anywhere—use it  
as you will.



Right:  
The handsome oval table promotes  
easy, informal communications in  
this conference area.

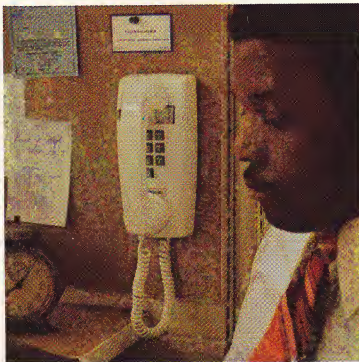
## Segmented Base System:

Left:  
Westinghouse ASD Tables  
are available in round, square, rec-  
tangular and oval shapes.

Tops are 1 1/4" thick, surfaced with  
Micarta in solid colors, patterns,  
simulated leathers or wood grained  
patterns—all in low glare finish.  
Also offered are genuine wood  
veneered tops.

The base is a system of individ-  
ual hubs, legs, stretchers, columns  
and spiders that combine to  
provide the support structure for the  
table tops.

# Accessories make the ASD Group more efficient

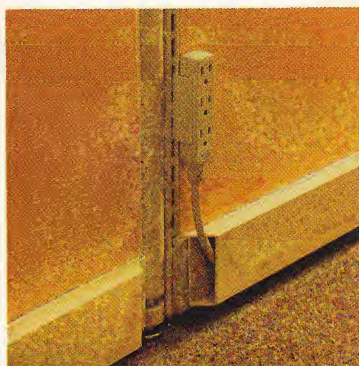


Wall hung telephone can be attached to tackboards and mounted at the desired height. They can be raised or lowered so they're always accessible to the work station and still keep the work surface free.

A painted aluminum coat hook conveniently snaps over panels for hanging coats, umbrellas, drawings or whatever.



Micarta chalkboards can be attached to any wall panel at any height in one-inch increments. A variety of sizes are available.



Triplex electrical outlets can be hooked into the slots on any wall panel to put current exactly where you want it for task lighting and machines.



Electrical cords are controlled by this wire clip which surrounds the cord and is held in place by simply inserting in the slotted standard on panel.

Wires that lead to the outlets along the bottom of wall panels are neatly stored in place and out of sight by the ASD Group patented wire managers illustrated above.



Paper organizers can be hung under shelves or cabinets individually or in groups. No special connectors are required.

The shelf dividers shown simply attach to the edge of the shelf. Used for horizontal subdivision and book-ends.



The wardrobe unit is a storehouse of convenience. It is compact, roomy, efficient, and yet very personal. Secure it on the wall panel close to the worker. Available in two depths to accommodate personal clothing, accessories or

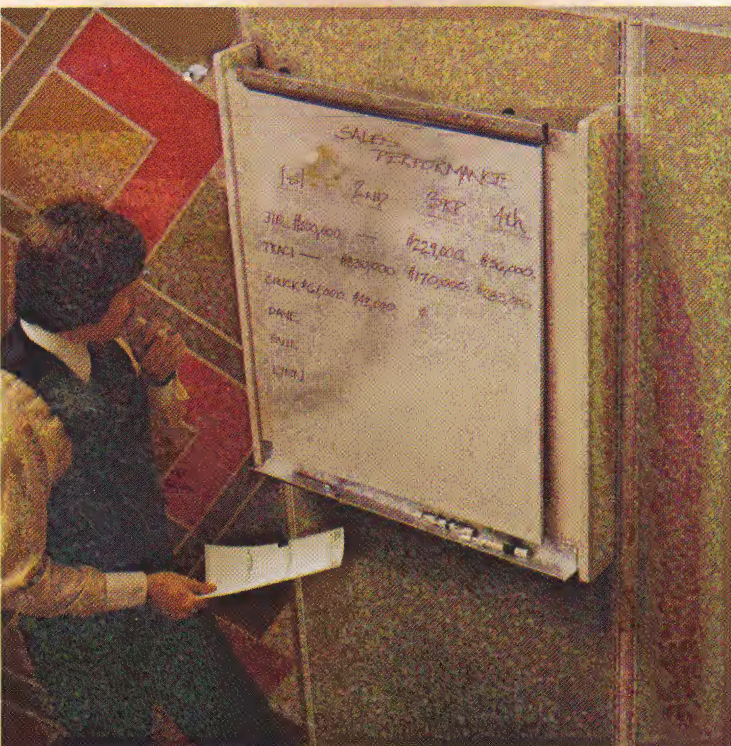
group hanging of items. Wardrobe door doubles as a chalkboard if required.



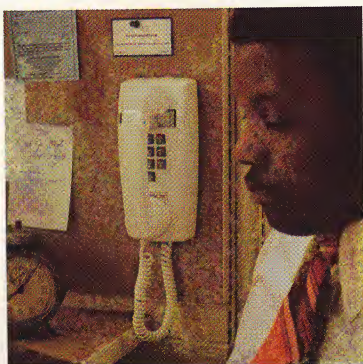
Many wardrobe accessories are available; coat hook and a molded plastic coat hanger as shown above or additional shelves, map or plan roll hangers, etc.

The flip chart easel is an accessory designed as a hang-on component for any wall panel. Holds a standard pad of flip chart paper and is complete with an aluminum holding tray.

Task lighting is made easy by attaching the light to the underside of any shelf or storage unit. Easily mounted to shelf flanges with metal hangers. Each light is complete with switch, cord, outlet and plug.



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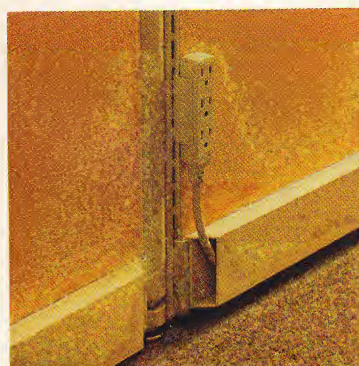


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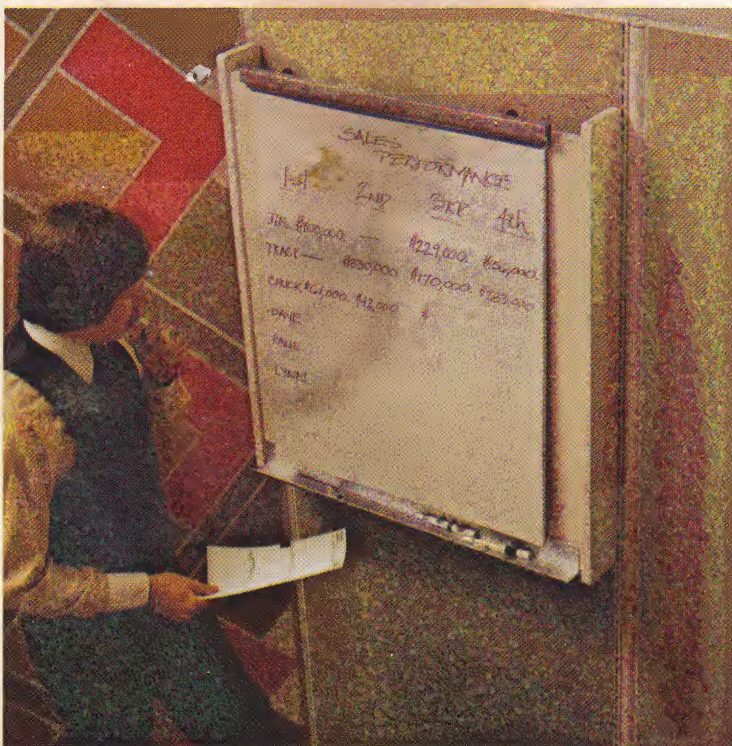
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# The Westinghouse willingness

Our most important concern is for our customers. The growth of the Westinghouse ASD Group open office system in less than five years includes literally thousands of installations throughout the United States and the world. We are not perfect but our concern for customer satisfaction is reflected in this unprecedented growth.

## Westinghouse—a Customer:

Westinghouse is committed to this industry and to the concept of open office planning. Every year the Westinghouse Corporation, through their numerous divisions and corporate offices, purchases vast numbers of ASD Group work stations. The Westinghouse Corporation puts its money where its commitment is. That's why we know from first hand experience what the customer, the designer and the architect needs to run an efficient and people oriented office. We're concerned, and back it up with first hand experience.

## We believe—

An open office system must be soundly planned. Planning should always be based on the premise that an office is not just a collection of furniture but is a planned entity that provides a living, functioning, productive and efficient working environment.

## We believe in its Versatility:

A systems approach must provide built-in versatility. It must begin with basics and build on them to meet the varying and specific needs of the individual and organization.

## We believe in its Economics:

The open office system must economically respond to the changing demands of the office. It must be able to change as departments change, to grow and shift as management groups grow and shift, and to quickly adapt itself to all the realignments that come with business aspirations and changing work patterns. It has to do this without major expense, and without the disruption and confusion that comes when conventional offices are changed or when walls have to be torn down or rebuilt.

## We believe in People:

We believe that open planning and the open office concerns itself more, and recognizes that the human condition and the individuality of people are among the most important considerations with which an organization must concern itself.

The system in and of itself does nothing for people. But, the conceptual aspects of overall planning makes the office the "tool" where workers perform, are productive and important contributors to society.

## We believe in Adaptability:

The open office gives each person the kind of office he needs to function efficiently. It provides the means to alter, enlarge, contract and change the office in a smooth, easy and economical way. We believe the office should permit reappraisal of layouts after completion without exorbitant cost. We believe it is, quite simply, the most efficient tool ever designed for the office worker.

## We have Proven Experience:

These benefits are a matter of record in Westinghouse ASD Group installations; N.C.R., Stanford University, A.A.A., Florida Power Corporation, Northrop, Borg-Warner, General Motors, Equitable Life Assurance Society, Bank of America, National Bank of Detroit, International Harvester, etc. ASD Group does what it's supposed to do in these and thousands of other facilities all over the country and throughout the world.



## Westinghouse ASD Group at N.C.R.:

The ASD Group delivers the utmost mobility for fast, frequent rearrangements.

N.C.R.'s Accounting Computer Division equipped their new facility in Wichita to meet a variety of flexible work situations. Smoothly. Swiftly. Economically.

N.C.R. utilized the open office concept and the Westinghouse ASD Group. They consolidated space in a modular design building that contained a total of 217,000

square feet. 80,000 square feet was used for open offices and the cafeteria. The original installation accommodated 651 work stations. They made sure there's enough modular spatial flexibility for shifting work loads and job responsibilities.







**Westinghouse ASD Group at  
Stanford University:**

The Stanford Center for Research and Development in Teaching is primarily concerned with improving the quality of teaching in American schools.

The building they occupy is a highly sophisticated and powerful "tool" for their activity. The building provides a laboratory equipped with the technology of the decade, devoted entirely to the study of how teaching in the schools and colleges can be improved.

The flexibility and usefulness of the open plan makes this building a model for the construction of educational research facilities elsewhere.

The space planners were pleased that Westinghouse ASD Group was so adaptable to the hexagonal grid layout planned for the Center.

### Westinghouse ASD Group at Florida Power Corporation:

The Westinghouse ASD Group has been in use at the Florida Power Corporation's General Offices since 1972, when Florida Power moved into their new consolidated administrative complex in St. Petersburg, Florida.

The system was selected because it's compatible with individual tasks in a number of administrative and service functions, and it's flexible. Over 600 work stations made up the initial installation, and additional planning calls for over a total of 800 work stations. Westinghouse continues to work closely with Florida Power Corporation.



**Westinghouse ASD Group—  
a leader in open office systems throughout  
the world.**

**We invite you to see ASD Group  
at one of our showrooms or  
the Westinghouse ASD Group dealer  
nearest you.**



**Westinghouse  
Electric Corporation**

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July 1975

MAY I TAKE THIS OPPORTUNITY

to thank you for your response to our recent ad in Business Week related to "THE OFFICE OF THE FUTURE".

We wish to thank you for your inquiry and enclosed is our descriptive brochure of the ASD Group product. If you require additional information, we will be happy to comply.

Yours very truly,

WESTINGHOUSE ELECTRIC CORPORATION  
Architectural Systems Division

S. W. Oppenhuizen  
Marketing Manager

Att.